Formative Assessment Task

2nd Grade: Measurement and Data

### 2.MD.9 Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.

Learning Target:

I can measure and record the lengths of several objects to the nearest whole-number.

**Materials:**

1. Classroom items pre-measured by the teacher and placed in a brown paper bag or shoebox. Items should be less than 10 inches long. (See below) *Suggested items: toy racecar, school supplies, keys, coins, etc.*
2. Line Plot Page (See below)
3. Ruler, pencils
4. Teacher will make a folder game using the Line Plot page below. Multiple copies of the Line Plot Page will go into the folder.

**Directions:**

*This Formative Assessment is designed to be a center or partner activity.*

1. Student(s) gather folder game and shoe box/brown paper bag from center area.
2. Student(s) will take one Line Plot page.
3. Student(s) will take one item from the shoe box/brown paper bag, measure it and plot it on the Line Plot page.
4. Students will continue until all items in the shoe box/brown paper bag have been measured.

**Considerations:**

* Observe if the student lines up the end of the object with an appropriate place on the ruler.
* Observe that student correctly uses the inch side of the ruler what asked to measure inches and the centimeter side when asked to measure centimeters.
* Observe that the student clearly marks an “x” on the line plot in an appropriate place.

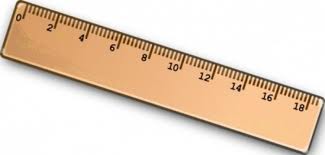
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Line Plot Measurements

Line Plot Measurements

Directions:

1. Take a Line Plot Measurements page.
2. Both players will label the axis of your line plot 1-10 inches.
3. Player 1 will pull one item out of the bag.
4. Player 1 will measure it with the ruler.
5. Record your measurement on the axis.
6. Player 2 will pull one item out of the bag.
7. Player 2 will measure it with the ruler.
8. Record your measurement on the axis.
9. Repeat until all items have been measured.

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| Teacher notes:  Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.  Students who demonstrate complete mastery accurately measure the lengths of all of the objects in the bag. Students who demonstrate mastery also correctly label the axis of the line plot and correctly use one x for each measurement on the line plot.  Students who demonstrate partial accomplishment may label the axis incorrectly (i.e. the numbers are not in numerical order) or students may draw 2 x’s for a 2 inch measurement instead of drawing one x. Or students might have difficulty measuring the objects accurately, which would result in incorrect results on the line plot. |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Not yet:** Student shows evidence of misunderstanding, incorrect concept or procedure | | | **Got It:** Student essentially understands the target concept. | | | | **NEEDS IMPROVEMENT**  **(N)** | | **WITH ASSISTANCE**  **(W)** | | | **INDEPENDENT**  **(I)** | | **0 Unsatisfactory:**  **Little Accomplishment**  The task is attempted and some mathematical effort is made. There may be fragments of accomplishment but little or no success. Further teaching is required. | **1 Marginal:**  **Partial Accomplishment**  Part of the task is accomplished, but there is lack of evidence of understanding or evidence of not understanding. Further teaching is required. | | **2 Proficient:**  **Substantial Accomplishment**  Student could work to full accomplishment with minimal feedback from teacher. Errors are minor. Teacher is confident that understanding is adequate to accomplish the objective with minimal assistance. | **3 Excellent:**  **Full Accomplishment**  Strategy and execution meet the content, process, and qualitative demands of the task or concept. Student can communicate ideas. May have minor errors. | |   Adapted from Van de Walle, J. (2004) Elementary and Middle School Mathematics: Teaching Developmentally. Boston: Pearson Education, 65 |